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- (71) Applicant (for all designated States except US): **INDIANA UNIVERSITY RESEARCH AND TECHNOLOGY CORPORATION** [US/US]; 351 West 10th Street, Indianapolis, IN 46202 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **REILLY, James, P.** [US/US]; 1001 South Nota Drive, Bloomington, IN 47401 (US). **THOMPSON, Matthew, S.** [US/US]; Apartment 424, 800 North Smith Road, Bloomington, IN 47408 (US).
- (74) Agent: **MICHAEL, Jeffrey, A.**; Barnes & Thornburg LLP, 11 South Meridian Street, Indianapolis, IN 46204 (US).

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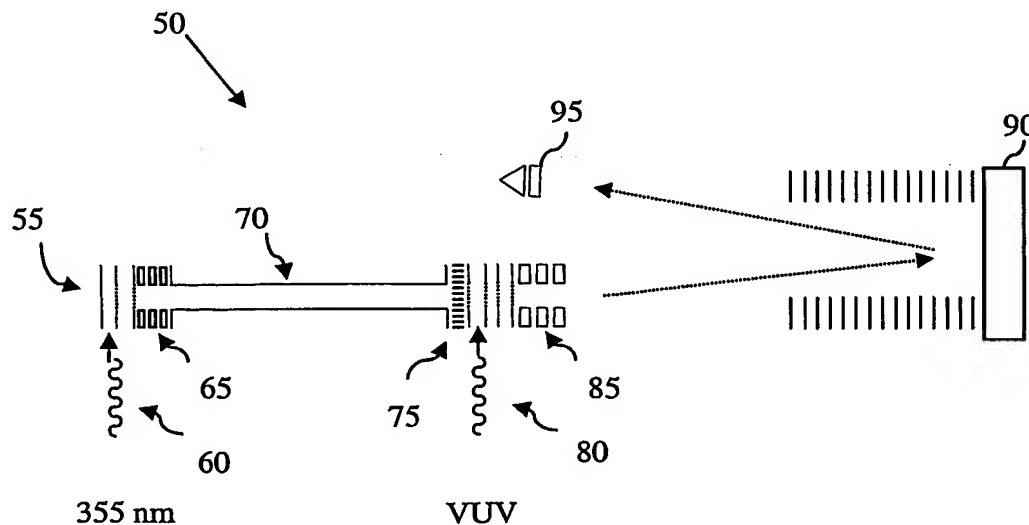
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(54) Title: METHODS AND APPARATUS FOR MASS SPECTRAL ANALYSIS OF PEPTIDES AND PROTEINS



(57) Abstract: Apparatus, device, and methods for fragmenting high molecular weight molecular ions, such as peptides or proteins, by treating the ions with predetermined wavelengths of light are described. Vacuum ultraviolet radiation as a source of predetermined wavelengths of laser light is described in one embodiment. A device (50) is described having a sample, such as a peptide, protein, protein digest, and the like enters through inlet (55) and is irradiated with a first source of light (60), which illustratively may be a laser light. The first source of laser light is illustratively at a wavelength and energy sufficient to convert molecules in the sample into molecular or precursor ions.



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